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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,212

11/22/2006

Valerie Frankard

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EXAMINER

KUMAR, VINOD

ART UNIT

PAPER NUMBER

1638

MAIL DATE

DELIVERY MODE

08/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,212	Applicant(s) FRANKARD ET AL.	
	Examiner VINOD KUMAR	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Office acknowledges Applicant's response filed in the paper of May 12, 2008. However, upon further consideration the restriction requirement mailed in the paper of April 9, 2008 is vacated. A new restriction requirement is set forth below. Any inconvenience to the Applicant is regretted.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing expression in a plant of a nucleic acid sequence encoding a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by site directed mutagenesis.

Group II, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing activity and/or increasing levels in a plant of a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by site directed mutagenesis.

Group III, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing expression in a plant of a nucleic acid sequence encoding a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by homologous recombination.

Art Unit: 1638

Group IV, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing activity and/or increasing levels in a plant of a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by homologous recombination.

Group V, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing expression in a plant of a nucleic acid sequence encoding a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by TILLING.

Group VI, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing activity and/or increasing levels in a plant of a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by TILLING.

Group VII, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing expression in a plant of a nucleic acid sequence encoding a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by T-DNA activation.

Group VIII, claim(s) 1 (part), 2, 3 (part) and 15 (part), drawn to a method for improving plant growth characteristics, said method comprising increasing activity and/or increasing levels in a plant of a GRUBX protein, or wherein said increase is effected by introducing a genetic modification, preferably in the locus of a gene encoding a GRUBX protein, or wherein said modification is effected by T-DNA activation.

Group IX, claim(s) 4-14, drawn to a method for improving plant growth characteristics comprising introducing and expressing in a plant an isolated nucleic acid sequence encoding a GRUBX protein, or wherein said improved growth characteristics is increased yield or modified plant architecture.

Group X, claim(s) 16, 18-19, 21-28, drawn to an isolated nucleic acid molecule encoding a protein having GRUBX activity, a construct, a transgenic plant cell, transgenic plant or plant cells, plant parts, including harvestable parts of said plant comprising a nucleic acid molecule encoding GRUBX protein, or a method of making said transgenic plant, comprising a nucleic acid sequence encoding GRUBX protein.

Art Unit: 1638

Group XI, claim 17, drawn to a method for the selection of plants having improved growth characteristics, which method is based on the selection of superior allelic variants of a GRUBX coding sequence and which alleles give rise to improved growth characteristics in a plant.

Group XII, claim 20, drawn to an isolated protein.

The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking Groups I-XII appear to be a nucleic acid sequence encoding a UBX domain protein of GRUBX. However, Town et al. (GenBank, NCBI, Sequence Accession No. NM_126269, pages 1-2, Published August 20, 2002) teach a nucleic acid sequence encoding a C2H2 zinc finger type protein. Also see, Town et al. (GenBank, NCBI, Sequence Accession No. NP_192817, pages 1-2, Published August 20, 2002) who teach a nucleic acid sequence encoding a UBX domain containing protein. It may be noted that a nucleic acid sequence encoding a variant of GRUBX protein, or a nucleic acid sequences capable of hybridizing to a nucleic acid sequence encoding GRUBX protein or variant thereof read on any C2H2 zinc finger type protein.

Therefore, the technical feature linking the inventions of Groups I-XII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art.

Applicant is also required to elect one nucleic acid sequence and its encoded protein with the elected group of claims. In the instant case, for Group X, one nucleic acid sequence and its encoded protein from the following SEQ ID NOs: 2, 5, 6, and 7. For Group XII, one protein sequence from SEQ ID NOs: 4 and 7.

Applicants are reminded that different nucleotide sequences and amino acid sequences are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute different inventive concepts.

Accordingly, Groups I-XII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod Kumar whose telephone number is (571) 272-4445. The examiner can normally be reached on 8.30 a.m. to 5.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Vinod Kumar/
Examiner, Art Unit 1638